SEQUENCE LISTING

```
<110> Urry, Dan
<120> Acoustic Absorption Polymers and Their Methods of Use
<130> BERL025/01US
<140> 09/746371
<141> 2000-12-20
<160> 47
<170> PatentIn version 3.0
<210> 1
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(5)
<223> This is a synthetic sequence.
<400> 1
Val Pro Gly Val Gly
               5
<210> 2
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(4)
<223>
      This is a synthetic sequence.
<400> 2
Val Pro Gly Gly
<210> 3
```

```
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(4)
<223> This is a synthetic sequence.
<400> 3
Gly Gly Val Pro
<210> 4
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(4)
<223> This is a synthetic sequence.
<400> 4
Gly Gly Phe Pro
<210> 5
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(4)
<223> This is a synthetic sequence.
<400> 5
Gly Gly Ala Pro
<210> 6
```

```
5
<211>
<212> PRT
<213> Artificial Sequence
<220>
<221> VARIANT
<222> (2)..(4)
<223>
      Residue at position 2 is V, E, F, Y or K
      Residue at position 4 is V, E, F or I
<400> 6
Gly Xaa Gly Xaa Pro
      7 .
<210>
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222>
      (1)..(6)
<223>
      This is a synthetic sequence.
<400> 7
Ala Pro Gly Val Gly Val
<210> 8
<211> 35
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(35)
<223>
      This is a synthetic sequence.
<400>
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Glu Gly Phe Pro Gly
                                   10
```

```
Val Gly Val Pro Gly Val Gly Phe Pro Gly Phe Gly Phe Pro Gly Val
            20
                                 25
                                                     30
Gly Val Pro
        35
       9
<210>
<211>
       35
<212> PRT
<213>
      Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(35)
<223>
       This is a synthetic sequence.
<400>
      9
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Glu Gly Phe Pro Gly
Val Gly Val Pro Gly Val Gly Phe Pro Gly Val Gly Phe Pro Gly Val
                                25
Gly Val Pro
        35
<210>
       10
<211>
       35
<212>
       PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222>
      (1)..(35)
<223>
       This is a synthetic sequence.
<400> 10
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Glu Gly Val Pro Gly
                5
1
                                     10
                                                         15
Val Gly Val Pro Gly Val Gly Phe Pro Gly Phe Gly Phe Pro Gly Val
            20
                                 25
                                                     30
Gly Val Pro
```

```
35
<210>
      11
<211>
      35
<212> PRT
      Artificial Sequence
<213>
<220>
<221> PEPTIDE
<222> (1)..(35)
<223>
      This is a synthetic sequence.
<400> 11
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Glu Gly Phe Pro Gly
               5
                                                       15
Val Gly Val Pro Gly Val Gly Val Gly Val Pro Gly Val
                               25
                                                   30
            20
Gly Val Pro
       35
<210> 12
<211> 35
<212> PRT
<213> Artificial Sequence
<220>
      PEPTIDE
<221>
<222> (1)..(35)
<223>
      This is a synthetic sequence.
<400> 12
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Glu Gly Val Pro Gly
Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
                               25
Gly Val Pro
```

<210>

<211>

35

13

65

```
PRT
<212>
       Artificial Sequence
<213>
<220>
<221>
       PEPTIDE
<222>
       (1)...(65)
       This is a synthetic sequence.
<223>
<400>
      13
Gly Val Gly Ile Pro Gly Phe Gly Glu Pro Gly Glu Gly Phe Pro Gly
                                     10
Val Gly Val Pro Gly Phe Gly Phe Pro Gly Phe Gly Ile Pro Gly Val
Gly Ile Pro Gly Phe Gly Glu Pro Gly Glu Gly Phe Pro Gly Val Gly
Val Pro Gly Phe Gly Phe Pro Gly Phe Gly Ile Pro Gly Val Gly Val
Pro
65
<210>
       14
<211>
       35
<212>
      PRT
<213> Artificial Sequence
<220>
<221>
      PEPTIDE
      (1)..(35)
<222>
<223>
       This is a synthetic sequence.
<400>
      14
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Lys Gly Phe Pro Gly
                                     10
                                                         15
Val Gly Val Pro Gly Val Gly Phe Pro Gly Phe Gly Phe Pro Gly Val
                                25
Gly Val Pro
        35
```

```
<210>
       15
<211>
       35
       PRT
<212>
<213>
       Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
       (1)..(35)
<223>
       This is a synthetic sequence.
<400> 15
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Lys Gly Phe Pro Gly
Val Gly Val Pro Gly Val Gly Phe Pro Gly Val Gly Phe Pro Gly Val
            2-0
                                 25
                                                     30
Gly Val Pro
        35
<210>
       16
       35
<211>
<212>
       PRT
<213>
       Artificial Sequence
<220>
<221> PEPTIDE
<222>
       (1)..(35)
       This is a synthetic sequence.
<223>
<400>
      16
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Lys Gly Val Pro Gly
Val Gly Val Pro Gly Val Gly Phe Pro Gly Phe Gly Phe Pro Gly Val
            20
                                                     30
Gly Val Pro
        35
<210>
       17
<211>
       35
<212>
       PRT
<213> Artificial Sequence
```

```
<220>
<221>
       PEPTIDE
<222>
      (1)..(35)
<223>
       This is a synthetic sequence.
<400>
      17
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Lys Gly Phe Pro Gly
Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
Gly Val Pro
        35
<210>
       18
<211>
       35
<212> PRT
<213>
       Artificial Sequence
<220>
<221> PEPTIDE
<222>
       (1)..(35)
       This is a synthetic sequence.
<223>
<400> 18
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Lys Gly Val Pro Gly
                                     10
                5
Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
            20
                                 25
                                                     30
Gly Val Pro
        35
       19
<210>
<211>
       35
<212>
      PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(35)
```

```
<223> This is a synthetic sequence.
<400> 19
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Glu Gly Phe Pro Gly
                5
                                                          15
Val Gly Val Pro Gly Val Gly Phe Pro Gly Lys Gly Val Pro Gly Val
            20
                                 25
                                                     30
Gly Val Pro
        35
       20
<210>
<211>
       35
<212>
       PRT
<213>
       Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
       (1)..(35)
<223>
       This is a synthetic sequence.
<400> 20
Gly Val Gly Val Pro Gly Val Gly Phe Pro Gly Glu Gly Phe Pro Gly
Val Gly Val Pro Gly Val Gly Val Pro Gly Lys Gly Val Pro Gly Val
Gly Val Pro
        35
<210>
       21
<211>
       5
<212>
       PRT
<213>
      Artificial Sequence
<220>
<221>
      VARIANT
<222>
      (4)..(4)
<223>
       Residue at position 4 is modified to have
```

an electroresponsive side chain

```
<400> 21
Val Pro Gly Xaa Gly
<210>
      22
<211>
       5
<212>
      PRT
<213> Artificial Sequence
<220>
<221>
      PEPTIDE
<222> (1)..(5)
<223>
      This is a synthetic sequence.
<400> 22
Ile Pro Gly Val Gly
<210>
       23
<211>
      11
<212> PRT
<213> Artificial Sequence
<220>
<221> VARIANT
<222>
      (6)..(6)
      Residue at position 6 is S, T or Y
<400>
      23
Gly Val Gly Val Pro Xaa Gly Val Gly Val Pro
                                    10
<210>
      24
<211>
      5
<212>
      PRT
<213>
      Artificial Sequence
<220>
<221>
      VARIANT
<222>
       (2)..(4)
      Residue at position 2 is V, E, F, Y, K, S or T
      Residue at position 4 is V, E, F, I, S, T or Y
      Al least one of residues at positions 2 or 4 is S, T or Y
```

```
<400> 24
Gly Xaa Gly Xaa Pro
<210>
      25
<211> 30
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
      (1)..(30)
<222>
<223>
      This is a synthetic sequence.
<400> 25
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Lys Gly Val Pro Gly
                5
1
                                    10
                                                        15
Val Gly Val Pro Gly Val Gly Phe Pro Gly Phe Gly Phe Pro
            20
                                25
                                                    30
<210>
      26
<211> 66
<212>
      DNA
<213> Artificial Sequence
<220>
<221> misc_structure
<222> (1)..(66)
<223>
      This is a synthetic sequence.
<400>
gaggatccag gcgttggggt accgggtgtt ggcgatccgg gtaaaggtgt cccggggttg
  60
gtgtgc
  66
<210>
      27
<211>
      66
<212> DNA
```

```
<213> Artificial Sequence
<220>
<221> misc_structure
<222> (1)..(66)
<223> This is a synthetic sequence.
<400> 27
ctggatccaa cgcctgggaa tccgaaaccc ggaaagccta cacccggcac accaacgccc
gggaca
   66
<210> 28
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(10)
<223> This is a synthetic sequence.
<400> 28
Gly Val Gly Val Pro Gly Tyr Gly Val Pro
                                    10
<210> 29
<211> 45
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(45)
<223> This is a synthetic sequence.
<400> 29
Gly Val Gly Ile Pro Gly Glu Gly Ile Pro Gly Val Gly Ile Pro Gly
                                    10
```

```
Val Gly Ile Pro Gly Glu Gly Ile Pro Gly Val Gly Ile Pro Gly Val
            20
                                 25
Gly Ile Pro Gly Glu Gly Ile Pro Gly Val Gly Ile Pro
                             40
<210>
       30
<211>
       30
<212>
       PRT
<213> Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
      (1)...(30)
<223>
       This is a synthetic sequence.
<400>
       30
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Glu Gly Ile Pro Gly
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro
<210>
       31
<211>
       30
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
      (1)..(30)
<222>
       This is a synthetic sequence.
<223>
<400>
       31
Gly Glu Gly Ile Pro Gly Val Gly Ile Pro Gly Glu Gly Ile Pro Gly
                5
1
                                                         15
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro
            20
                                 25
                                                     30
<210>
       32
<211>
       45
<212>
       PRT
<213> Artificial Sequence
```

```
<220>
<221>
       PEPTIDE
<222>
       (1)..(45)
<223>
       This is a synthetic sequence.
<400>
       32
Gly Val Gly Ile Pro Gly Lys Gly Ile Pro Gly Val Gly Ile Pro Gly
Val Gly Ile Pro Gly Lys Gly Ile Pro Gly Val Gly Ile Pro Gly Val
Gly Ile Pro Gly Lys Gly Ile Pro Gly Val Gly Ile Pro
        35
                                                 45
<210>
       33
<211>
       30
<212>
      PRT
<213>
       Artificial Sequence
<220>
<221>
      PEPTIDE
<222> (1)..(30)
<223>
       This is a synthetic sequence.
<400>
      33
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Lys Gly Ile Pro Gly
                                     10
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro
                                25
                                                     30
<210>
       34
<211>
       30
<212>
      PRT
<213>
      Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
       (1)..(30)
       This is a synthetic sequence.
```

```
<400> 34
Gly Lys Gly Ile Pro Gly Val Gly Ile Pro Gly Lys Gly Ile Pro Gly
                                                          15
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro
                                                      30
<210>
       35
<211>
       110
<212>
       PRT
<213>
       Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
       (1)..(110)
<223>
       This is a synthetic sequence.
<400>
       35
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                                     10
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val
Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly
Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile
    50
                         55
Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro
65
                                                              80
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                                     90
                                                          95
                85
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
            100
                                 105
                                                      110
<210>
       36
<211>
       110
<212>
       PRT
<213>
       Artificial Sequence
```

<220>

```
VARIANT
<221>
<222>
       (107)..(107)
       Residue at position 107 is associated with an SO4 ion
<223>
<400>
      36
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                5
                                                         15
1
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val
            20
                                                     30
Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly
Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile
                         55
Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                                                     110
            100
                                 105
<210>
       37
<211>
       60
<212>
       PRT
<213>
       Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
       (1)..(60)
<223>
       This is a synthetic sequence.
<400> 37
```

Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly 5 1 10 15

Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val 20 25 30

Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly

```
35
                            40
                                                 45
Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                                             60
    50
                        55
<210>
       38
<211>
      60
<212>
      PRT
<213>
      Artificial Sequence
<220>
<221>
      VARIANT
<222>
      (58)..(58)
<223>
      Residue at position 58 is associated with an SO4 ion
<400> 38
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                                     10
                                                         15
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val
            20
                                25
Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly
Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                        55
<210>
       39
<211>
       45
<212>
      PRT
      Artificial Sequence
<213>
<220>
<221> PEPTIDE
<222>
      (1)..(45)
      This is a synthetic sequence.
<223>
<400> 39
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                5
                                                         15
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val
                                                     30
```

25

20

```
Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                            40
<210>
       40
<211>
      45
<212>
      PRT
<213>
      Artificial Sequence
<220>
<221>
      PEPTIDE
<222>
       (1)..(45)
<223>
       This is a synthetic sequence.
<400>
      40
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val
            20
Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
        35
                            40
                                                 45
<210>
       41
<211>
       30
<212>
      PRT
<213> Artificial Sequence
<220>
<221>
      PEPTIDE
<222>
      (1)..(30)
<223>
       This is a synthetic sequence.
<400>
      41
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                                    10
                                                         15
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
            20
                                25
<210>
       42
<211>
       30
<212>
      PRT
```

```
<213> Artificial Sequence
<220>
<221> VARIANT
<222> (28)..(28)
<223>
      Residue at position 28 is associated with an SO4 ion
<400> 42
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly
                5
                                    10
                                                        15
Val Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                                25
<210> 43
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<221> PEPTIDE
<222> (1)..(15)
<223>
      This is a synthetic sequence.
<400> 43
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                                    10
<210> 44
<211>
      15
<212> PRT
<213> Artificial Sequence
<220>
<221> VARIANT
<222> (13)..(13)
<223>
      Residue at position 13 is associated with an SO4 ion
<400> 44
Gly Val Gly Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly Ile Pro
                                    10
```

```
<210>
       45
<211>
       10
<212>
       PRT
<213>
       Artificial Sequence
<220>
<221>
       PEPTIDE
<222>
       (1)..(10)
<223>
       This is a synthetic sequence.
<400>
      45
Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly
                5
                                     10
<210>
       46
<211>
       10
<212>
       PRT
<213> Artificial Sequence
<220>
<221>
       VARIANT
<222>
       (9)..(9)
       Residue at position 9 is associated with an SO4 ion
<223>
<400>
       46
Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly
                                     10
<210>
       47
<211>
       10
<212>
      PRT
<213>
       Artificial Sequence
<220>
<221>
      VARIANT
<222>
       (9)..(9)
<223>
       Residue at position 9 is associated with an MgSO4 ion
<400>
       47
Ile Pro Gly Val Gly Ile Pro Gly Tyr Gly
                                     10
```

THIS PAGE BLANK (USPTO)